

PCT/ SE 02 / 01903

02 -02- 2005

CLAIMS

1. Use of *Lactobacillus reuteri* strains that
 - a. Exhibit good toxin binding and neutralizing effect; which may be confirmed by bringing *L.reuteri* cells or supernatant in contact with toxin and test for the difference in available toxin e.g. by antibody test and
 - b. Exhibit good CD4+ cell recruitment which may be tested by using antibodies against CD4 e.g. with immunohistochemical immunofluorescent methods for the producing of a composition for improving immune-function in mammals.
2. A product comprising a strain with at least the characteristics according to claim 1.
3. The product of claim 2 wherein the product is formulated as a food containing cells of the selected strain.
4. The product of claim 2 wherein the product is formulated as a tablet containing cells of the selected strain.
5. The product of claim 2 wherein the product is formulated as a dietary supplement containing cells of the selected strain.
6. The product of claim 2 wherein the product is formulated as a confectionery containing cells of the selected strain.
7. The product of claim 2 wherein the product is formulated as a drug containing cells of the selected strain.

0 2 -02- 2005²

8. The use of the culture supernatant of *L.reuteri* ATCC 55730 for neutralizing bacterial Toxins.
9. A method for improving immune-function in mammals using *Lactobacillus reuteri* strains in products containing cells of such strains, comprising: using strains that
 - a. Exhibit good toxin binding and neutralizing effect; which may be confirmed by bringing *L.reuteri* cells or supernatant in contact with toxin and test for the difference in available toxin e.g. by antibodies
 - b. and exhibit good CD4+ cell recruitment, which may be tested by using antibodies against CD4 e.g. with immunohistochemical immunoflourescent methods.